

CLAIMS

What is claimed is:

1. A method of extracting or concentrating the polar constituents from plants of the family Brassicaceae, comprising:

5 combining plant material from the Family Brassicaceae and with an alcohol solvent;

agitating the combination;

filtering the combination to resolve an alcohol remnant substantially higher in polar components and lower in lipidic components than the plant material; and

10 evaporating the alcohol to resolve the polar components.

2. The method of claim 1 wherein the plant material is the hypocotyls of the family Brassicaceae.

15 3. The method of claim 1 wherein the plant is of the genus Lepidium.

4. The method of claim 1 wherein the method further comprises,

washing, drying, and grinding the plant material, prior to the step of combining with the alcohol solvent.

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5. The method of claim 4 wherein the drying of the plant material is selected from the drying methods consisting of, evaporation and heating.

6. The method of claim 4 wherein the final moisture content of the washed, dried, and ground plant material is about between 1 and 20 percent.

7. The method of claim 1 where the alcohol solvent is Methanol.

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8. The method of claim 1 wherein the plant material is combined with an alcohol in a 1:4 ratio

9. The method of claim 1 where the step of agitation comprises stirring.

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10. The method of claim 1 where the step of agitation may be accompanied with heating.

11. The method of claim 1 where the step of filtering comprises filtering with at least two filters having a progressive decrease in pore size.

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12. The method in claim 1 where the plant material is first placed in a bag comprising a porous filter material, and then combined with an alcohol solvent.

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13. The method of claim 1 where the plant material may be macerated and then combined with an alcohol solvent.

14. The method of claim **1** wherein the step of evaporating the alcohol remnant to resolve the polar components is selected from the group of evaporating method consisting of; evaporation, heating, spray drying, freeze drying, and vacuum drying.

15. The method of claim **1** wherein the polar components are concentrated and the lipidic components reduced relative to the parent plant material.

16. An extract of family Brassicaceae, comprising:

a pharmaceutical dosage unit with concentrated polar components relative to the lipidic components.

17. The extract in claim **16** wherein the pharmaceutical dosage unit increases the growth of fish.

18. The extract in claim **16** wherein the pharmaceutical dosage unit increases the survivability of fish.

19. The extract in claim **16** wherein the pharmaceutical dosage unit increases the biomass of fish.

20. The extract in claim **16** wherein the pharmaceutical dosage unit increases the feed conversion ratio of fish.

21. The extract in claim **16** wherein the pharmaceutical dosage unit further comprises cereal grains.

5 **22.** The extract in claim **21** wherein the pharmaceutical dosage unit further comprises vitamins.

23. The extract in claim **21** wherein the pharmaceutical dosage unit is in the form a fish food selected from the group consisting of, pellets and fish meal.

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